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Social Participation of Pupils with Special Needs in Eight, Ninth and Tenth Grade: A Pilot
Study

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Abstract

In the inclusion debate, social participation has been considered a key issue. However, research addressing the social participation of children with SEN has revealed that peer interactions between students with and without SEN may not spontaneously occur (Frostdad & Pijl, 2007). This study, which is part of a larger study, has three aims; i.e., 1) exploring the psychometric properties of the Dutch translation of the CATCH, 2) exploring possible cultural differences and 3) identifying factors associated with adolescents' attitudes towards peers with disabilities. An online survey was set up and the CATCH was tested among 173 Flemish adolescents (age range = 11-20). Furthermore, several background factors were assessed. Results supported the reliability of the translated version of the CATCH, revealing a two-factor structure of the CATCH, i.e., a cognitive and an affective-behavioral dimension. Factors independently associated with more positive attitudes were being female, having a close family member or a close friend with a disability, and viewing a video introduction of a peer with a disability before assessing attitudes. These findings underline the importance of the way in which students with disabilities are presented to their peers.

Keywords: social participation, attitudes, disability, adolescents, Flanders

Determinants of Social Participation of Pupils with Special Educational Needs in Mainstream Secondary Schools: A Pilot Study.

Over the past decades, the inclusion of students with special educational needs (SEN) in regular schools has become a global trend (Pijl, Meijer, & Hegarty, 1997). In the inclusion debate, social participation has been considered a key issue. Social contact and relations with typical peers have been identified as parent's first motive for their children's placement in a mainstream school (Scheepstra, Nakken, & Pijl, 1999). However, research addressing the social participation of children with SEN has revealed that peer interactions between students with and without SEN may not spontaneously occur (Frostdad & Pijl, 2007). Despite the increasing number of studies on the social inclusion of students with SEN, there are some major lacks in the current knowledge base. First, social participation of students with SEN has primarily been studied using primary school samples despite the fact that social participation becomes more vital and complex at the level of secondary education. Secondly, current research has mainly focused on the quantitative feature of social participation (e.g., number of friends), disregarding other features of social participation as the quality or stability of social relations or the characteristics of friends, such as their attitudes. In contemporary research, an association between SEN students' social participation and the attitudes of their classmates is assumed. However, different theories about the direction of effects prevail (i.e., contact hypothesis vs. theory of planned behavior). Third, the vast majority of research on the social participation of students with SEN has been conducted in North America. Nevertheless, research suggests that culture plays an important role in the formation and development of social relations, socio-emotional development of children (Chen et al., 2004) and attitudes (Townsend & Hassall, 2007).

By means of a large-scaled, longitudinal study, currently being conducted in Flemish secondary schools, we aim to extend the current knowledge base. One part of the longitudinal

study focuses on attitudes of classmates of children with SEN towards peers with disabilities. However, currently, no research has been done in Flanders to assess students' attitudes towards peers with disabilities. This created several questions that needed to be answered before the onset of the longitudinal study. Therefore, a pilot study was set up. The first question regarded the assessment of attitudes of adolescents towards peers with disabilities. According to findings, based on a comprehensive literature study of Vignes and colleagues (2008), the Chedoke-McMaster Attitudes towards Children with Handicaps (CATCH; Rosenbaum, Armstrong, & King, 1986), was found to have the best psychometric properties to assess students' attitudes. The CATCH was designed for use in children aged 9 to 13 years, but was successfully used in samples up to 16 years old (McDougall, De Wit, King, Miller, & Killip, 2004). Furthermore, it assessed all three components of attitudes (affective, behavioural and cognitive), and had acceptable levels of construct validity, internal consistency of the overall scale and test-retest reliability. Consequently, we decided to use the CATCH scale to assess students' attitudes in the longitudinal study. However, the CATCH scale was never used in a Dutch speaking country before or tested among high school students. The CATCH scale was translated into Dutch, and its validity and reliability needed to be tested among Flemish adolescents. Second, attitudes are described as 'learned predispositions reflecting how favourable or unfavourable people are towards other people, objects or events' (Townsend & Hassall, 2007, p. 266). Because attitudes are learned predispositions, we might assume that they are susceptible to environmental influences. Many studies have explored attitudes towards peers with disabilities and identified factors that might affect them. For example, researchers have found that attitudes could differ by a variety of cultural factors (e.g., English-speaking vs. non English-speaking; Rosenbaum, Armstrong, & King, 1987) and between societies (e.g., Isrealean vs. Canadian sample; Tirosh, Schanin, & Reiter, 1997). Furthermore, there are many differences between educational systems, even

within Europe. Whereas some European countries are known for their ‘one-track approach’ (i.e., the inclusion of almost all pupils within mainstream education; e.g., Norway), other countries developed a ‘multi-track approach’ (i.e., with a multiplicity of approaches and variety of services between the two systems; e.g., France and U.K.), and few included a ‘two-track approach’ (i.e., the special and regular education system are regarded as two distinct education systems) (European Agency for Development in Special Needs Education, 2003). Currently, the Flemish education system is still regarded as a ‘two-track system’, in which the regular and the special education system exist parallel to one another. Consequently, we might expect differences in youngsters’ attitudes towards peers with disabilities with other European countries (e.g., Norway and the U.K.), which have a longer history with inclusive education or offer a variety of services. However, information on the attitudes of adolescents toward peers with disabilities in Flanders, Belgium, is not available. Third, other variables have been found to be associated with attitudes as well. Vignes and colleagues (2009) make a further distinction between personal characteristics (e.g., gender, academic achievement in comparison to classmates, and amount of close friends), ‘disability knowledge factors’ (i.e., information received about disabilities as well as acquaintance with people with disabilities) and contextual data (e.g., characteristics of the school children are attending). Being female (e.g., Vignes et al.), having a better perception of your own life (e.g., Vignes et al.), receiving information about disabilities (e.g., Maras & Brown, 2000), or having a close relationship with someone with a disability (e.g., Rosenbaum et al., 1986), are just some of the variables that have been found to create a more open attitude toward persons with disabilities. However, some questions still prevail. Some authors found that the effect of some ‘disability knowledge’ factors is not straightforward. The effect of information was found to depend on who gives the information (Morton & Campbell, 2008) and the characteristics of the child receiving the information (e.g., social status; Campbell, Ferguson, Herzinger, Jackson, &

Marino, 2005). However, until now, nothing is known about the effect of the manner of presentation of this information. Furthermore, the association of contact and attitudes was related to the time and length of the exposure (Rimmerman, Hozmi, & Duvdevany, 2000), the frequency of contacts (Hastings & Graham, 1995) and the type of disability children are exposed to (Vignes et al., 2009)(Vignes et al., 2009). In the prospect of interventions, identifying determinants of attitudes serves two purposes; i.e., first, by linking personal factors to attitudes we might be able to select persons with less tolerant opinions towards peers with disabilities; second, by linking disability knowledge factors and contextual factors to attitudes, we might be able to learn something about the processes involved in the formation of attitudes. Therefore, clarity on the effect of new variables and support to earlier findings about the determinants of attitudes is much needed.

Consequently, three aims were connected to this pilot study. A first goal was to explore the psychometric properties of the Dutch translation of the CATCH scale. To ensure the reliability of the scale in a sample of secondary school students in Flanders, the factorial structure of the CATCH scale, and the internal consistency was studied. The second goal was to explore and compare students' attitudes towards peers with disabilities internationally. The third goal was to investigate the association with personal factors (i.e., gender, age, and self-proclaimed friends), 'disability knowledge' factors (i.e., have a disability themselves, acquaintance with a person with a disability, type of relation with a person with a disability, frequency of contact, attitude towards different types of disabilities, and manner of presentation) and 'contextual factors' (i.e., type of education).

Method

An online survey, with links posted on four popular websites for adolescents, was set up. Students' attitudes towards peers with disabilities were assessed by means of the CATCH, which includes three subscales or components i.e., an affective component, a behavioral

component, and a cognitive component. The CATCH was translated into Dutch using a translation – back translation procedure. Personal (i.e., gender, age), ‘disability knowledge’ (i.e., having a disability, knowing someone with a disability, if so, type of relation with that person and frequency of contact) and contextual factors (i.e., type of education) were assessed in a separate section. A sociometric nomination procedure was used to assess the number of self-proclaimed friends. Furthermore, the items in the CATCH were linked to two different cases (visible vs. non-visible disability), presented in two different ways (video or short description). Confirmatory factor analysis and univariate and multivariate regression analyses were used.

Results and Discussion

Results of the confirmatory factor analyses should be read with caution. Due to the rather small sample size ($N = 173$), these results can only be considered as indicative. Confirmatory factor analyses revealed a marginally reasonable fit for the three or two factor model, i.e., cognitive dimension and an affective-behavioral dimension. The Satorra Bentler chi square index for both models was significant, indicating a less than desirable fit. However, the other fit indices for the three and two factor model revealed a fairly reasonable fit. The Satorra Bentler difference test indicated no significant differences between both models. Based on principles of parsimony and earlier findings in the literature, indicating a very narrow band between the behavioural and affective dimension (Rosenbaum et al., 1986; Tirosh et al.; Vignes et al., 2009), the two factor model was preferred. A further screening of the factor loadings of each item, indicated that an ambiguous translation of one of the items might be partially responsible for the marginally reasonable fit of the model. However, the internal consistency of the subscales and the total scale was good. Therefore, we can conclude that the Dutch version of the CATCH score provides a reasonable base, albeit with a

necessary change in the translation of one of the items, for assessing attitudes towards peers with disabilities.

Furthermore, some evidence was found for cultural differences in attitudes towards peers with disabilities, with Flemish youngsters within the same age group having a fairly favourable attitude towards peers with disabilities, in comparison to other youngsters (e.g., French; Vignes et al., 2009; American; Holtz & Tessman, 2007; Canadian; Rosenbaum, Armstrong, & King, 1988). Moreover, according to the results of this first pilot study, Flemish youngsters within the same age group, educated within a 'two-track' education system, have significantly favourable attitudes towards peers with disabilities, compared to French youngsters, where a 'multi-track' education system is in effect. However, again these results have to be regarded as preliminary. Because of the applied method and although adolescents did not know anything about the content of the questionnaire before opening the link, adolescents volunteered to complete the questionnaire and could stop the questionnaire whenever they wanted. Furthermore, the majority of respondents in our sample were girls, who were found to have a more favourable attitude towards peers with disabilities.

Personal factors such as gender and disability knowledge factors such as having a close family member or a close friend with a disability were associated with more positive attitudes, supporting several earlier findings. Moreover, providing a video of a peer with a disability contributed to more tolerant attitudes of non-disabled students towards their disabled peers. This finding underscores the importance of the way information is provided. No differences were found for visible vs. non-visible impairments, age, number of friends, having a disability, frequency of contact or education type.

The most important limitation that needs to be pointed out with regard to this pilot study, is the rather small sample size. The lack of a sufficient sample size is a rather big

limitation when conducting confirmatory factor analysis. Consequently, further research remains necessary in larger samples, as well as a more in-depth study on item-level and its stability across age groups. The second limitation concerns the applied method. Because adolescents could fill in the questionnaire on a free bases, no control was exhibited on the representativity of the research sample, generating problems for the external validity of the study. Future research should devote more attention to the representativity of the research sample.

Despite the limitations due to the smaller size and the applied method, the findings of this pilot study were helpful in several ways. First, the pilot study proved that the translated version of the CATCH scale might provide a solid starting point to assess attitudes towards students with disabilities. Furthermore, earlier findings were supported, i.e., the possibility of cultural differences within samples, the effect of gender or having a close family member or friend on the attitude towards peers with disabilities. However, the most important finding regarded the effect of the manner of presentation of students with disabilities. These findings have large implications for further research and intervention studies.

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